ABSTRACT
The volume of data generated by aircraft, and the operations of the enterprises that rely on them, is growing exponentially. The question that both civilian airlines and military operators face is how to turn that information into insight that facilitates better decision-making. Without a strategy for deriving value from data, it has the potential to produce overwhelming IT costs and underwhelming operational impact. This paper will focus on how maturing digital technologies such as cloud computing, big data processing and digital twins can transform the aviation enterprise by reducing costs, improving availability and decreasing operational risks. We will focus on both well-known applications of digital technology, such as predictive analytics for engine performance, and then explore more advanced and emerging uses such as full airframe monitoring, fleet management, maintenance optimization, and supply chain transformation. Specific examples will be provided from GE Aviation's extensive experience with Digital Transformation as well as from our customers in the airline and military space.

BIOGRAPHY OF SPEAKER
Mr Todd Stiefler is the General Manager of the Defence business at GE Aviation Digital Solutions. In this capacity, he has global responsibility for commercial, product, and ecosystem development in the defence sector. He has previously held roles in product management and marketing with GE Digital and GE Intelligent Platforms.

GE Aviation Digital Solutions brings together best-in-class analytics and deep domain expertise to help customers solve their toughest challenges. With GE’s extensive aviation experience, they’re able to create digital solutions that turn real-time data into actionable insights and positive outcomes for customers. Prior to joining GE, Mr Todd served as the Legislative Director and Military Legislative Assistant for three US Senators over 10 years. He also consulted with the US Army, US Navy, and the Missile Defence Agency. Mr Todd has a BA from Williams College and an MBA from the University of Virginia.